## Cost of Food Services and Distribution

The estimated bill for marketing domestic farm foods—which does not include imported foods—was \$466 billion in 1998. This amount covered all charges for transporting, processing, and distributing foods that originated on U.S. farms. It represented 80 percent of the \$585 billion consumers spent for these foods. The remaining 20 percent, or \$119 billion, represents the gross return paid to farmers.

The cost of marketing farm foods has increased considerably over the years, mainly because of rising costs of labor, transportation, food packaging materials, and other inputs used in marketing, and also because of the growing volume of food and the increase in services provided with the food.

In 1988, the cost of marketing farm foods amounted to \$302 billion. In the decade after that, the cost of marketing rose about 54 percent. In 1998, the marketing bill rose 4.8 percent.

These rising costs have been the principal factor affecting the rise in consumer food expenditures. From 1988 to 1998, consumer expenditures for farm foods rose \$186 billion. Roughly 88 percent of this increase resulted from an increase in the marketing bill.

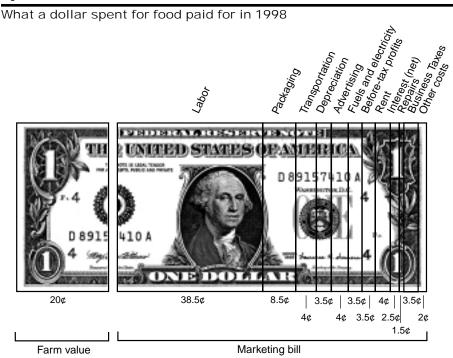
The cost of labor is the biggest part of the total food marketing bill, accounting for nearly half of all marketing costs. Labor used by assemblers, manufacturers, wholesalers, retailers, and public eating places cost \$228 billion in 1998. This was 5.1 percent higher than in 1997 and 65 percent more than in 1988. The total number of food marketing workers in 1998 was about 13.8 million, about 17 percent more than a decade ago. About 73 percent of the growth in food industry employment occurred in public eating places.

Wage supplements comprise about 20 percent of total labor costs. However, the cost of wage supplements has accelerated at a slower pace in recent years for two reasons. First, the cost of medical care has risen at a slower pace in recent years. Second, union contracts often require workers to pay a greater portion of their medical care costs.

Labor productivity in food manufacturing industries has risen moderately over the years, thereby causing a long-term decline in employment. This trend largely reflects the adoption of various technologies which have reduced industry demand for labor. On the other hand, labor productivity has declined in food stores. This drop reflects increased demand for labor-intensive convenience foods prepared by supermarkets. The additional services which are required to prepare these foods have raised employee hours relative to output, thereby accounting for the lowered productivity.

A wide variety of other costs comprise the balance of the marketing bill. These costs include packaging, transportation, energy, advertising, business taxes, net interest, depreciation, rent, and repairs. Their relative proportions are illustrated in the accompanying dollar chart.

Packaging is the second largest component of the marketing bill. At \$50 billion, packaging accounted for 8.5 percent of the food dollar. Paperboard boxes and containers are the largest packaging cost, and comprise approximately 40 percent of total packaging expenses. Metal cans are the second largest packaging expense, making up



about 20 percent of total food packaging expenses. The costs of plastic containers and wrapping materials account for another 20 percent of total food packaging expenses. Miscellaneous packaging materials such as glass containers and metal foil account for the remaining 20 percent of total packaging costs.

The energy bill for food marketing costs totaled \$21 billion in 1998, and accounted for 3.5 percent of retail food expenditures. Natural gas and electricity prices exert the greatest impact on the energy costs of processing and retailing food. The prices of alternative energy sources, such as oil, have little effect. Public eating places and other food service facilities incur nearly 40 percent of the fuel and electricity costs of food marketing. Their energy expenses have risen because of large growth in the away-from-home food market. Energy costs of food retailers are the second largest, at about 26 percent of the energy bill, and consist mainly of electricity. Electricity is the primary source of energy in these food industries. The food processing sector is responsible for another 20 percent of the food energy bill, and uses a combination of gas and electricity. The wholesaling sector accounts for the remaining 14 percent of the food energy bill, and relies primarily on electricity.

Intercity truck and rail transportation for farm foods came to \$24 billion and accounted for about 4 percent of retail food expenditures in 1998. Rail freight rates rose about 3 percent, while trucking rates grew roughly 3.5 percent. Labor costs account for 40 percent of trucking expenses, with fuel comprising another 20 percent.

Advertising expenses totaled \$22 billion and comprised 4 percent of food expenditures in 1998. Food manufacturing accounts for about half of total food industry advertising expenditures, with food service contributing another 25 percent, and food retailing about 15 percent. A mix of print and broadcast media are used to promote food industry products. In recent years, food service and food retail firms have experienced the largest increases in advertising expenditures.

Depreciation, rent, and repairs together came to \$53 billion and accounted for 9 percent of the 1998 consumer food dollar. The food service sector incurred about 40 percent of these costs, while food stores made up about a quarter of the total. Manufacturing and wholesaling establishments together accounted for the remaining 35 percent. Food service establishments incurred high property rental expenses, and thus had the highest total of any food sector.

Net interest accounts for only 2.5 percent of total consumer expenditures, but grew sharply over the last decade, rising to \$13 billion in 1998. Most of the increase occurred in the food store sector, and reflected higher debt acquired due to merger and acquisition activity, particularly leveraged buyouts. Moreover, net interest grew as the result of loans booked during years of rising interest rates, such as 1995.

## ■ Food Prices and the Farm-to-Retail Price Spread

n the United States, total retail food prices (including meals served in restaurants) rose 36.0 percent over the last 10 years (1988-98). Prices of food eaten away from home increased 32.3 percent, while retail food store prices increased 38.2 percent.

Prices of goods and services, excluding food, in the Consumer Price Index climbed 38.1 percent over the same 10 years. Transportation was up 30.3 percent; housing, 35.4 percent; medical care, 74.7 percent; and apparel and upkeep, 15.3 percent.

Food prices include payments for both the raw farm product and marketing services. In 1998 the farm value, or payment for the raw product, averaged 2.2 percent of the retail cost of a market basket of U.S. farm foods sold in food stores. The other 7.8 percent, the farm-retail price spread, consisted of all processing, transportation, wholesaling, and retailing charges incurred after farm products leave the farm.

Farm-retail spreads have increased every year for the past 30 years, largely reflecting rising costs of labor, packaging, and other processing and marketing inputs. In 1998, farm-to-retail spreads rose an average of 3.6 percent and farmers received 2.7 percent less for the food they produced. The farm value as a percentage of retail prices was about 1 percent lower in 1998 than in 1997. Meanwhile, retail food prices rose 2.1 percent. Widening farm-retail spreads continued to push up food costs in 1998.

The percentage of the retail price accounted for by the farm value varies widely among foods. Generally, it is larger for animal products than for crop-based foods, and smaller for foods that require considerable processing and packaging. The percentage generally decreases as the degree of processing increases. For example, the farm value of meat was 30 percent in 1998, while cereal and bakery products